

ИНСТИТУТ ТЕХНИЧКИХ НАУКА САНУ

Кнез Михајлова 35/IV

11000 Београд

НАУЧНОМ ВЕЋУ ИНСТИТУТА ТЕХНИЧКИХ НАУКА САНУ

Предмет: Молба за покретање поступка за реизбор у звање научни сарадник

Молим Научно веће Института техничких наука САНУ, да у складу са Правилником о поступку, начину вредновања и квантитативном исказивању научноистраживачких резултата истраживача (Сл. Гласник РС, бр. 24/2016, 21/2017), покрене поступак мог реизбора у звање научни сарадник.

За чланове комисије за припрему извештаја Научном већу, предлагам:

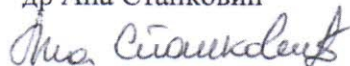
1. др Смиљу Марковић, научног саветника Института техничких наука САНУ
2. др Љиљану Дамјановић-Василић, редовног професора Факултета за Физичку хемију, Универзитета у Београду
3. др Миодрага Здујића, научног саветника Института техничких наука САНУ

У Прилогу достављам:

1. Биографију са библиографијом
2. Извештај о цитираности радова
3. Уверење о стицању звања научни сарадник

У Београду:
20.11.2019. год.

Подносилац Молбе:
др Ана Станковић



др Ана Станковић, научни сарадник

Биографија: Др Ана Станковић је рођена 1979. год. у Крушевцу. Дипломирала је на Факултету за Физичку хемију 2005. год, на истом факултету је магистрала 2009. а докторску дисертацију одбранила је 2014. год. У звање Научног сарадника изабрана је 2015. год. У Институту техничких наука САНУ запослена је од 2005. године. Аутор и коаутор је 10 публикација објављених у међународним часописима, коаутор је већег броја саопштења са међународних научних скупова штампаних у целини.

Радови Ане Станковић су према бази SCOPUS (на дан 16.11.2019.год.) цитирани 190 пута, од тога број хетероцитата износи 176, док је вредност *h* индекса 6.

Области научног деловања:

- Синтеза и карактеризација материјала на бази цинк оксида.
- Испитивање антимикуробне активност прахова ZnO и њихове токсичности.
- Фотокатализа и деградација различитих загађујућих једињења у присуству честица ZnO под утицајем видљиве светлости.

Одабрани радови:

Radovi u vrhunskom međunarodnom časopisu, M₂₁

1. A. Stanković, Lj. Veselinović, S. D. Škapin, S. Marković and D. Uskoković, Controlled mechanochemically assisted synthesis of ZnO nanopowders in the presence of oxalic acid, *Journal of Materials Science*, 46, 11 (2011) 3716-3724, DOI: 10.1007/s10853-011-5273-6
2. A. Stanković, S. Dimitrijević, D. Uskoković, "Influence of size scale and morphology on antibacterial properties of ZnO powders hydrothermally synthesized using different surface stabilizing agents", *Colloids and Surfaces B: Biointerfaces* 102 (2013) 21-28, <http://dx.doi.org/10.1016/j.colsurfb.2012.07.033>
3. S. Marković, V. Rajić, A. Stanković, Lj. Veselinović, J. Belošević-Čavor, K. Batalović, N. Abazović, S.D. Škapin, D. Uskoković, "Effect of PEO molecular weight on sunlight induced photocatalytic activity of ZnO/PEO composites", *Solar Energy*, 127 (2016) 124-135, <http://dx.doi.org/10.1016/j.solener.2016.01.026>.

Radovi u istaknutom međunarodnom časopisu, M₂₂

4. A. Stanković, Z. Stojanović, Lj. Veselinović, S. D. Škapin, I. Bračko, S. Marković, D. Uskoković, ZnO micro and nanocrystals with enhanced visible light absorption, *Materials Science and Engineering B* 177, 13 (2012) 1038-1045, <http://dx.doi.org/10.1016/j.mseb.2012.05.013>.

5. A. Stanković, M. Sezen, M. Milenković, S. Kaišarević, N. Andrić, M. Stevanović, "PLGA/Nano-ZnO Composite Particles for Use in Biomedical Applications: Preparation, Characterization, and Antimicrobial Activity", *Journal of Nanomaterials* 2016, Article ID 9425289, <https://doi.org/10.1155/2016/9425289>.
6. S. Marković, A. Stanković, J. Dostanić, Lj. Veselinović, L. Mančić, S. D. Škapin, G. Dražić, I. Janković-Častvan, D. Uskoković, "Simultaneous enhancement of natural sunlight- and artificial UV-driven photocatalytic activity of a mechanically activated ZnO/SnO₂ composite", *RSC Advances*, 7, 68 (2017) 42725-42737. <https://doi.org/10.1039/C7RA06895F>.

Rad koji nema kategoriju:

7. S. Marković, A. Stanković, Z. Lopičić, S. Lazarević, M. Stojanović, D. Uskoković, "Application of raw peach shell particles for removal of methylene blue", *Journal of Environmental Chemical Engineering*, 3, 2 (2015) 716-724. <http://dx.doi.org/10.1016/j.jece.2015.04.002>

Monografska studija/poglavlje u knjizi M₁₁ ili rad u tematskom zborniku vodećeg međunarodnog značaja, M₁₁

1. M. Stevanović, M. J. Lukić, A. Stanković, N. Filipović, M. Kuzmanović, Ž. Janićijević, Chapter 1 - Biomedical inorganic nanoparticles: preparation, properties, and perspectives, in: Grumezescu, V., Grumezescu, A.M. (Eds.), *Materials for Biomedical Engineering*. Elsevier, 2019, pp. 1–46, <https://doi.org/10.1016/B978-0-08-102814-8.00001-9>.

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1. [Influence of size scale and morphology on antibacterial properties of ZnO powders hydrothermally synthesized using different surface stabilizing agents](#)

By: [Stankovic, A.](#); [Dimitrijevic, S.](#); [Uskokovic, D.](#)

[COLLOIDS AND SURFACES B-BIOINTERFACES](#) Volume: 102 Pages: 21-28 Published: FEB 1 2013

Heterocitati

1. Abou Oualid, H., Amadine, O., Essamlali, Y., Danoun, K., Zahouily, M., 2018. Supercritical CO₂ drying of alginate/zinc hydrogels: a green and facile route to prepare ZnO foam structures and ZnO nanoparticles. RSC ADVANCES 8, 20737–20747. <https://doi.org/10.1039/c8ra02129e>
2. Adhikari, S.P., Pant, H.R., Kim, J.H., Kim, H.J., Park, C.H., Kim, C.S., 2015. One pot synthesis and characterization of Ag-ZnO/g-C₃N₄ photocatalyst with improved photoactivity and antibacterial properties. COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS 482, 477–484. <https://doi.org/10.1016/j.colsurfa.2015.07.003>
3. Ainuddin, A.R., Kalidasan, K.A.L., Kamdi, Z., Ibrahim, S.A., Hussin, R., Junaid, T.M., 2019. The Effect of Zinc Oxide Nanostructure on the Antibacterial Activity, in: Sulaiman, MA and Ahmad, ZA and Mohamed, JJ (Ed.), MATERIALS CHARACTERIZATION USING X-RAYS AND RELATED TECHNIQUES, AIP Conference Proceedings. Univ Malaysia Kelantan; X Rays Applicat Soc Malaysia. <https://doi.org/10.1063/1.5089393>
4. Akbar, S., Haleem, K.S., Tauseef, I., Rehman, W., Ali, N., Hasan, M., 2017. Raphanus sativus Mediated Synthesis, Characterization and Biological Evaluation of Zinc Oxide Nanoparticles. NANOSCIENCE AND NANOTECHNOLOGY LETTERS 9, 2005–2012. <https://doi.org/10.1166/nnl.2017.2550>
5. Ali, A., Phull, A.-R., Zia, M., 2018. Elemental zinc to zinc nanoparticles: is ZnO NPs crucial for life? Synthesis, toxicological, and environmental concerns. NANOTECHNOLOGY REVIEWS 7, 413–441. <https://doi.org/10.1515/ntrev-2018-0067>
6. Alipour, A., Javanshir, S., Peymanfar, R., 2018. Preparation, Characterization and Antibacterial Activity Investigation of Hydrocolloids Based Irish Moss/ZnO/CuO Bio-based Nanocomposite Films. JOURNAL OF CLUSTER SCIENCE 29, 1329–1336. <https://doi.org/10.1007/s10876-018-1449-4>
7. Anwar, A., Khalid, S., Perveen, S., Ahmed, S., Siddiqui, R., Khan, N.A., Shah, M.R., 2018. Synthesis of 4-(dimethylamino) pyridine propylthioacetate coated gold nanoparticles and their antibacterial and photophysical activity. JOURNAL OF NANOBIO TECHNOLOGY 16. <https://doi.org/10.1186/s12951-017-0332-z>
8. Arshad, M., Qayyum, A., Abbas, G., Haider, R., Iqbal, M., Nazir, A., 2018. Influence of different solvents on portrayal and photocatalytic activity of tin-doped zinc oxide nanoparticles. JOURNAL OF MOLECULAR LIQUIDS 260, 272–278. <https://doi.org/10.1016/j.molliq.2018.03.074>
9. Bai, X., Li, L., Liu, H., Tan, L., Liu, T., Meng, X., 2015. Solvothermal Synthesis of ZnO Nanoparticles and Anti-Infection Application in Vivo. ACS APPLIED MATERIALS & INTERFACES 7, 1308–1317. <https://doi.org/10.1021/am507532p>
10. Bayrami, A., Parvinroo, S., Habibi-Yangjeh, A., Pouran, S.R., 2018. Bio-extract-mediated ZnO nanoparticles: microwave-assisted synthesis, characterization and antidiabetic activity evaluation.

<https://doi.org/10.1080/21691401.2017.1337025>

11. Bui, V.K.H., Park, D., Lee, Y.-C., 2017. Chitosan Combined with ZnO, TiO₂ and Ag Nanoparticles for Antimicrobial Wound Healing Applications: A Mini Review of the Research Trends. *POLYMERS* 9. <https://doi.org/10.3390/polym9010021>
12. Cai, Q., Gao, Y., Gao, T., Lan, S., Simalou, O., Zhou, X., Zhang, Y., Harnood, C., Gao, G., Dong, A., 2016. Insight into Biological Effects of Zinc Oxide Nanoflowers on Bacteria: Why Morphology Matters. *ACS APPLIED MATERIALS & INTERFACES* 8, 10109–10120. <https://doi.org/10.1021/acsami.5b11573>
13. Cai, R., Wang, H., Cao, M., Hao, L., Zhai, L., Jiang, S., Li, X., 2015. Synthesis and antimicrobial activity of mesoporous hydroxylapatite/zinc oxide nanofibers. *MATERIALS & DESIGN* 87, 17–24. <https://doi.org/10.1016/j.matdes.2015.08.004>
14. Cepin, M., Hribar, G., Caserman, S., Orel, Z.C., 2015a. Morphological impact of zinc oxide particles on the antibacterial activity and human epithelia toxicity. *MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS* 52, 204–211. <https://doi.org/10.1016/j.msec.2015.03.053>
15. Cepin, M., Jovanovski, V., Podlogar, M., Orel, Z.C., 2015b. Amino- and ionic liquid-functionalised nanocrystalline ZnO via silane anchoring - an antimicrobial synergy. *JOURNAL OF MATERIALS CHEMISTRY B* 3, 1059–1067. <https://doi.org/10.1039/c4tb01300j>
16. Chandran, D., Nair, L.S., Balachandran, S., Babu, K.R., Deepa, M., 2015. Structural, optical, photocatalytic, and antimicrobial activities of cobalt-doped tin oxide nanoparticles. *JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY* 76, 582–591. <https://doi.org/10.1007/s10971-015-3808-z>
17. Chavan, S., Nadanathangam, V., 2019. Effects of Nanoparticles on Plant Growth-Promoting Bacteria in Indian Agricultural Soil. *AGRONOMY-BASEL* 9. <https://doi.org/10.3390/agronomy9030140>
18. Chen, Y.-M., Jia, H.-W., 2014. Environmentally friendly synthetic route to the monodispersed ZnO nanoparticles on large-scale. *MATERIALS LETTERS* 132, 389–392. <https://doi.org/10.1016/j.matlet.2014.06.118>
19. Chen, Y.-M., Jia, H.-W., 2015. Synthesis and characterization of ZnO one-dimensional nanomaterials. *Gongneng Cailiao/Journal of Functional Materials* 46, 05151–05154. <https://doi.org/10.3969/j.issn.1001-9731.2015.05.030>
20. Costa, D., Borges, J., Mota, M.F., Rodrigues, M.S., Pereira-Silva, P., Ferreira, A., Pereira, C.S., Sampaio, P., Vaz, F., 2019. Effect of microstructural changes in the biological behavior of magnetron sputtered ZnO thin films. *JOURNAL OF VACUUM SCIENCE & TECHNOLOGY A* 37. <https://doi.org/10.1116/1.5048785>
21. de Souza, R.C., Haberbeck, L.U., Riella, H.G., Ribeiro, D.H.B., Carciofi, B.A.M., 2019. ANTIBACTERIAL ACTIVITY OF ZINC OXIDE NANOPARTICLES SYNTHESIZED BY SOLOCHEMICAL PROCESS. *BRAZILIAN JOURNAL OF CHEMICAL ENGINEERING* 36, 885–893. <https://doi.org/10.1590/0104-6632.20190362s20180027>
22. Dutta, R.K., Nenavathu, B.P., Talukdar, S., 2014. Anomalous antibacterial activity and dye degradation by selenium doped ZnO nanoparticles. *COLLOIDS AND SURFACES B-BIOINTERFACES* 114, 218–224. <https://doi.org/10.1016/j.colsurfb.2013.10.007>
23. Esmailzadeh, H., Sangpour, P., Shahraz, F., Hejazi, J., Khaksar, R., 2016. Effect of nanocomposite packaging containing ZnO on growth of *Bacillus subtilis* and *Enterobacter aerogenes*. *MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS* 58, 1058–1063. <https://doi.org/10.1016/j.msec.2015.09.078>
24. Fadhil, I.A., 2019. Hydrothermal growth of ZnO nanostructures deposited on Si substrate at room temperature and microwave conditions (preparation and morphology). *Journal of Computational and Theoretical Nanoscience* 16, 2732–2735. <https://doi.org/10.1166/jctn.2019.8119>
25. Fiedot, M., Karbownik, I., Maliszewska, I., Rac, O., Suchorska-Wozniak, P., Teterycz, H., 2015. Deposition of one-dimensional zinc oxide structures on polypropylene fabrics and their antibacterial

properties. TEXTILE RESEARCH JOURNAL 85, 1340–1354.

<https://doi.org/10.1177/0040517514563716>

26. Hasan, A., Waibhaw, G., Saxena, V., Pandey, L.M., 2018. Nano-biocomposite scaffolds of chitosan, carboxymethyl cellulose and silver nanoparticle modified cellulose nanowhiskers for bone tissue engineering applications. INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES 111, 923–934. <https://doi.org/10.1016/j.ijbiomac.2018.01.089>
27. Horzum, N., Hilal, M.E., Isik, T., 2018. Enhanced bactericidal and photocatalytic activities of ZnO nanostructures by changing the cooling route. NEW JOURNAL OF CHEMISTRY 42, 11831–11838. <https://doi.org/10.1039/c8nj01849a>
28. Hussain, A., Oves, M., Alajmi, M.F., Hussain, I., Amir, S., Ahmed, J., Rehman, M.T., El-Seedi, H.R., Ali, I., 2019. Biogenesis of ZnO nanoparticles using Pandanus odorifer leaf extract: anticancer and antimicrobial activities. RSC ADVANCES 9, 15357–15369. <https://doi.org/10.1039/c9ra01659g>
29. Izdinsky, J., Reinprecht, L., Nosal', E., 2018. ANTIBACTERIAL EFFICIENCY OF SILVER AND ZINC-OXIDE NANOPARTICLES IN ACRYLATE COATING FOR SURFACE TREATMENT OF WOODEN COMPOSITES. WOOD RESEARCH 63, 365–372.
30. Kahraman, O., Binzet, R., Turunc, E., Dogen, A., Arslan, H., 2018. Synthesis, characterization, antimicrobial and electrochemical activities of zinc oxide nanoparticles obtained from sarcopoterium spinosum (L.) spach leaf extract. MATERIALS RESEARCH EXPRESS 5. <https://doi.org/10.1088/2053-1591/aad953>
31. Khan, M.F., Ansari, A.H., Hameedullah, M., Ahmad, E., Husain, F.M., Zia, Q., Baig, U., Zaheer, M.R., Alam, M.M., Khan, A.M., AlOthman, Z.A., Ahmad, I., Ashraf, G.M., Aliev, G., 2016. Sol-gel synthesis of thorn-like ZnO nanoparticles endorsing mechanical stirring effect and their antimicrobial activities: Potential role as nano-antibiotics. SCIENTIFIC REPORTS 6. <https://doi.org/10.1038/srep27689>
32. Kim, J.-H., Ma, J., Lee, S., Jo, S., Kim, C.S., 2019. Effect of Ultraviolet-Ozone Treatment on the Properties and Antibacterial Activity of Zinc Oxide Sol-Gel Film. MATERIALS 12. <https://doi.org/10.3390/ma12152422>
33. Kiss, L.V., Hracs, K., Nagy, P.I., Seres, A., 2018. Effects of Zinc Oxide Nanoparticles on Panagrellus redivivus (Nematoda) and Folsomia candida (Collembola) in Various Test Media. INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH 12, 233–243. <https://doi.org/10.1007/s41742-018-0086-y>
34. Kumar, R., Umar, A., Kumar, G., Nalwa, H.S., 2017. Antimicrobial properties of ZnO nanomaterials: A review. CERAMICS INTERNATIONAL 43, 3940–3961. <https://doi.org/10.1016/j.ceramint.2016.12.062>
35. Kumar, C.G., Pombala, S., Poornachandra, Y., Agarwal, S.V., 2016. Synthesis, characterization, and applications of nanobiomaterials for antimicrobial therapy, in: Nanobiomaterials in Antimicrobial Therapy: Applications of Nanobiomaterials. pp. 103–152. <https://doi.org/10.1016/B978-0-323-42864-4.00004-X>
36. Lebedev, A., Anariba, F., Tan, J.C., Li, X., Wu, P., 2018. A review of physiochemical and photocatalytic properties of metal oxides against Escherichia coli. JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY 360, 306–315. <https://doi.org/10.1016/j.jphotochem.2018.04.013>
37. Lima, M.K., Fernandes, D.M., Silva, M.F., Baesso, M.L., Neto, A.M., de Moraes, G.R., Nakamura, C.V., Caleare, A. de O., Winkler Hechenleitner, A.A., Gomez Pineda, E.A., 2014. Co-doped ZnO nanoparticles synthesized by an adapted sol-gel method: effects on the structural, optical, photocatalytic and antibacterial properties. JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY 72, 301–309. <https://doi.org/10.1007/s10971-014-3310-z>
38. Machovsky, M., Kuritka, I., Bazant, P., Vesela, D., Saha, P., 2014. Antibacterial performance of ZnO-based fillers with mesoscale structured morphology in model medical PVC composites. MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS 41, 70–77. <https://doi.org/10.1016/j.msec.2014.04.034>

39. Mallakpour, S., Abdolmaleki, A., Elmira Moosavi, S., 2018. Production and Characterization of Novel Nanocomposites Based on Poly(Amide-Imide) Containing N-Trimellitylimido-L-Alanine Diacid and 4,4'-Diaminodiphenylmethane Segments Reinforced With Grafted Nano-ZnO by Citric Acid as a Biological Ligand. *POLYMER COMPOSITES* 39, 2394–2402. <https://doi.org/10.1002/pc.24221>
40. Mallakpour, S., Behranvand, V., 2015. Biosafe, Renewable, and Optically Active Diacids Containing Amino Acid as Coupling Agents for the Modification of ZnO Nanoparticles. *SYNTHESIS AND REACTIVITY IN INORGANIC METAL-ORGANIC AND NANO-METAL CHEMISTRY* 45, 1039–1044. <https://doi.org/10.1080/15533174.2013.862672>
41. Mallakpour, S., Khadem, E., 2015. Studies of Surface Functional Modification of alpha-Al₂O₃ Nanoparticles Using Organic Chain Dicarboxylic Acid Containing Trimellitylimido-Amino Acid-Based Diacids Via Post Modification Method. *SYNTHESIS AND REACTIVITY IN INORGANIC METAL-ORGANIC AND NANO-METAL CHEMISTRY* 45, 1773–1779. <https://doi.org/10.1080/15533174.2013.872130>
42. Mallakpour, S., Nouruzi, N., 2017. Effects of citric acid-functionalized ZnO nanoparticles on the structural, mechanical, thermal and optical properties of polycaprolactone nanocomposite films. *MATERIALS CHEMISTRY AND PHYSICS* 197, 129–137. <https://doi.org/10.1016/j.matchemphys.2017.05.023>
43. Mallakpour, S., Reisi, Z., 2018. Novel poly(vinyl chloride) nanocomposite films containing alpha-Al₂O₃ nanoparticles capped with vitamin B-1: preparation, morphological, and thermal characterization. *POLYMER BULLETIN* 75, 1895–1914. <https://doi.org/10.1007/s00289-017-2128-6>
44. Marsich, E., Bellomo, F., Turco, G., Travan, A., Donati, I., Paoletti, S., 2013. Nano-composite scaffolds for bone tissue engineering containing silver nanoparticles: preparation, characterization and biological properties. *JOURNAL OF MATERIALS SCIENCE-MATERIALS IN MEDICINE* 24, 1799–1807. <https://doi.org/10.1007/s10856-013-4923-4>
45. Maheswari, P., Ponnusamy, S., Harish, S., Ganesh, M.R., Hayakawa, Y., 2018. Hydrothermal synthesis of pure and bio modified TiO₂: Characterization, evaluation of antibacterial activity against gram positive and gram negative bacteria and anticancer activity against KB Oral cancer cell line. *Arabian Journal of Chemistry*. <https://doi.org/10.1016/j.arabjc.2018.11.020>
46. Matula, K., Richter, L., Janczuk-Richter, M., Nogala, W., Grzeszkowiak, M., Peplinska, B., Jurga, S., Wyroba, E., Suski, S., Bilski, H., Silesian, A., Bluysen, H.A.R., Derebecka, N., Wesoly, J., Los, J.M., Los, M., Decewicz, P., Dziewit, L., Paczesny, J., Holyst, R., 2019. Phenotypic plasticity of Escherichia coli upon exposure to physical stress induced by ZnO nanorods. *SCIENTIFIC REPORTS* 9. <https://doi.org/10.1038/s41598-019-44727-w>
47. McGuffie, M.J., Hong, J., Bahng, J.H., Glynos, E., Green, P.F., Kotov, N.A., Younger, J.G., VanEpps, J.S., 2016. Zinc oxide nanoparticle suspensions and layer-by-layer coatings inhibit staphylococcal growth. *NANOMEDICINE-NANOTECHNOLOGY BIOLOGY AND MEDICINE* 12, 33–42. <https://doi.org/10.1016/j.nano.2015.10.002>
48. Mizielinska, M., Kowalska, U., Jarosz, M., Suminska, P., Landercy, N., Duquesne, E., 2018. The Effect of UV Aging on Antimicrobial and Mechanical Properties of PLA Films with Incorporated Zinc Oxide Nanoparticles. *INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH* 15. <https://doi.org/10.3390/ijerph15040794>
49. Mizielinska, M., Lisiecki, S., Jotko, M., Chodzyska, I., Bartkowiak, A., 2015. The antimicrobial properties of polylactide films covered with ZnO nanoparticles-containing layers. *PRZEMYSŁ CHEMICZNY* 94, 1205–1208.
50. Mizielinska, M., Łopusiewicz, Ł., Mężyńska, M., Bartkowiak, A., 2017. The influence of accelerated UV-A and Q-sun irradiation on the antimicrobial properties of coatings containing ZnO nanoparticles. *Molecules* 22. <https://doi.org/10.3390/molecules22091556>
51. Moulahi, A., Sediri, F., 2014. ZnO nanowires and nanopills: Hydrothermal synthesis, characterization and optical properties. *CERAMICS INTERNATIONAL* 40, 943–950. <https://doi.org/10.1016/j.ceramint.2013.06.090>

52. Munoz-Fernandez, L., Sierra-Fernandez, A., Flores-Carrasco, G., Milosevic, O., Rabanal, M.E., 2017. Solvothermal synthesis of Ag/ZnO micronanostructures with different precursors for advanced photocatalytic applications. *ADVANCED POWDER TECHNOLOGY* 28, 83–92. <https://doi.org/10.1016/j.apt.2016.09.033>
53. Muratova, E.N., Maraeva, E., V., Nalimova, S.S., Permyakov, N., V., Moshnikov, V.A., 2019. Overview of the State-of-the-Art on Using Alumina-Based Nanoporous Membranes for Adsorptive Enrichment and Phase Separation. *PETROLEUM CHEMISTRY* 59, 822–830. <https://doi.org/10.1134/S0965544119080139>
54. Nguyen, T.M.P., Hirota, S., Suzuki, Y., Kato, M., Hirota, K., Taguchi, H., Yamada, H., Tsukagoshi, K., 2018. Preparation of ZnO powders with strong antibacterial activity under dark conditions. *Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy* 65, 316–324. <https://doi.org/10.2497/jjspm.65.316>
55. Paduraru, A., Ghitulica, C., Trusca, R., Surdu, V.A., Neacsu, I.A., Holban, A.M., Birca, A.C., Iordache, F., Vasile, B.S., 2019. Antimicrobial Wound Dressings as Potential Materials for Skin Tissue Regeneration. *MATERIALS* 12. <https://doi.org/10.3390/ma12111859>
56. Palama, I.E., D'Amone, S., Arcadio, V., Biasiucci, M., Mezzi, A., Cortese, B., 2016. Cell mechanotactic and cytotoxic response to zinc oxide nanorods depends on substrate stiffness. *TOXICOLOGY RESEARCH* 5, 1699–1710. <https://doi.org/10.1039/c6tx00274a>
57. Pandimurugan, R., Thambidurai, S., 2014. Seaweed-ZnO Composite for Better Antibacterial Properties. *JOURNAL OF APPLIED POLYMER SCIENCE* 131. <https://doi.org/10.1002/app.40948>
58. Pariona, N., Paraguay-Delgado, F., Basurto-Cereceda, S., Morales-Mendoza, J.E., Hermida-Montero, L.A., Mtz-Enriquez, A.I., 2019. Shape-dependent antifungal activity of ZnO particles against phytopathogenic fungi. *Applied Nanoscience (Switzerland)*. <https://doi.org/10.1007/s13204-019-01127-w>
59. Parmar, A., Kaur, G., Kapil, S., Sharma, V., Sharma, S., 2019. Biogenic PLGA-Zinc oxide nanocomposite as versatile tool for enhanced photocatalytic and antibacterial activity. *APPLIED NANOSCIENCE* 9, 2001–2016. <https://doi.org/10.1007/s13204-019-01023-3>
60. Pasquet, J., Chevalier, Y., Couval, E., Bouvier, D., Noizet, G., Morliere, C., Bolzinger, M.-A., 2014. Antimicrobial activity of zinc oxide particles on five micro-organisms of the Challenge Tests related to their physicochemical properties. *INTERNATIONAL JOURNAL OF PHARMACEUTICS* 460, 92–100. <https://doi.org/10.1016/j.ijpharm.2013.10.031>
61. Patil, R., Gholap, H., Warule, S., Banpurkar, A., Kulkarni, G., Gade, W., 2015. Quantum dots conjugated zinc oxide nanosheets: Impeder of microbial growth and biofilm. *APPLIED SURFACE SCIENCE* 326, 73–81. <https://doi.org/10.1016/j.apsusc.2014.11.113>
62. Paul, S.K., Dutta, H., Sarkar, S., Sethi, L.N., Ghosh, S.K., 2019. Nanosized Zinc Oxide: Super-Functionalities, Present Scenario of Application, Safety Issues, and Future Prospects in Food Processing and Allied Industries. *FOOD REVIEWS INTERNATIONAL* 35, 505–535. <https://doi.org/10.1080/87559129.2019.1573828>
63. Perez Espitia, P.J., Ferreira Soares, N. de F., Teofilo, R.F., Vitor, D.M., dos Reis Coimbra, J.S., de Andrade, N.J., de Sousa, F.B., Sinisterra, R.D., Alves Medeiros, E.A., 2013. Optimized dispersion of ZnO nanoparticles and antimicrobial activity against foodborne pathogens and spoilage microorganisms. *JOURNAL OF NANOPARTICLE RESEARCH* 15. <https://doi.org/10.1007/s11051-012-1324-4>
64. Piva, D.H., Piva, R.H., Rocha, M.C., Dias, J.A., Montedo, O.R.K., Malavazi, I., Morelli, M.R., 2017. Antibacterial and photocatalytic activity of ZnO nanoparticles from Zn(OH)(2) dehydrated by azeotropic distillation, freeze drying, and ethanol washing. *ADVANCED POWDER TECHNOLOGY* 28, 463–472. <https://doi.org/10.1016/j.apt.2016.11.001>
65. Pushpa, K.C.S., Ravichandran, A.T., Ravichandran, K., Sakthivel, B., Baneto, M., Swaminathan, K., 2015. Tuning the magnetic behavior and improving the antibacterial efficiency of ZnO nanopowders through Zr plus Fe doping for biomedical applications. *CERAMICS INTERNATIONAL* 41, 12910–12916. <https://doi.org/10.1016/j.ceramint.2015.06.132>

66. Ramani, M., Ponnusamy, S., Muthamizhchelvan, C., Marsili, E., 2014. Amino acid-mediated synthesis of zinc oxide nanostructures and evaluation of their facet-dependent antimicrobial activity. *COLLOIDS AND SURFACES B-BIOINTERFACES* 117, 233–239. <https://doi.org/10.1016/j.colsurfb.2014.02.017>
67. Rasmi, K.R., Vanithakumari, S.C., George, R.P., Mudali, U.K., 2018. Active Nano Metal Oxide Coating for Bio-fouling Resistance. *TRANSACTIONS OF THE INDIAN INSTITUTE OF METALS* 71, 1322–1328. <https://doi.org/10.1007/s12666-017-1264-x>
68. Rauwel, P., Salumaa, M., Aasna, A., Galeckas, A., Rauwel, E., 2016. A Review of the Synthesis and Photoluminescence Properties of Hybrid ZnO and Carbon Nanomaterials. *JOURNAL OF NANOMATERIALS*. <https://doi.org/10.1155/2016/5320625>
69. Ravichandran, A.T., Karthick, R., Pushpa, K.C.S., Ravichandran, K., Chandramohan, R., 2017. Uniform and Well-Dispersed ZnO:Fe Nanoparticles with High Photoluminescence and Antibacterial Properties Prepared by Soft Chemical Route. *JOURNAL OF INORGANIC AND ORGANOMETALLIC POLYMERS AND MATERIALS* 27, 1084–1089. <https://doi.org/10.1007/s10904-017-0558-0>
70. Regiel-Futyr, A., Dabrowski, J.M., Mazuryk, O., Spiwak, K., Kyzioł, A., Pucelik, B., Brindell, M., Stochel, G., 2017. Bioinorganic antimicrobial strategies in the resistance era. *COORDINATION CHEMISTRY REVIEWS* 351, 76–117. <https://doi.org/10.1016/j.ccr.2017.05.005>
71. Reinprecht, L., Vidholdova, Z., 2017. GROWTH INHIBITION OF MOULDS ON WOOD SURFACES IN PRESENCE OF NANO-ZINC OXIDE AND ITS COMBINATIONS WITH POLYACRYLATE AND ESSENTIAL OILS. *WOOD RESEARCH* 62, 37–43.
72. Reinprecht, L., Vidholdova, Z., Gaspar, F., 2016. DECAY INHIBITION OF MAPLE WOOD WITH NANO-ZINC OXIDE USED IN COMBINATION WITH ESSENTIAL OILS. *ACTA FACULTATIS XYLOLOGIAE ZVOLEN* 58, 51–58. <https://doi.org/10.17423/afx.2016.58.1.06>
73. Reinprecht, L., Vidholdova, Z., Kozienka, M., 2015. DECAY INHIBITION OF LIME WOOD WITH ZINC OXIDE NANOPARTICLES USED IN COMBINATION WITH ACRYLIC RESIN. *ACTA FACULTATIS XYLOLOGIAE ZVOLEN* 57, 43–52.
74. Restrepo, I., Flores, P., Rodriguez-Llamazares, S., 2019. Antibacterial Nanocomposite of Poly(Lactic Acid) and ZnO Nanoparticles Stabilized with Poly(Vinyl Alcohol): Thermal and Morphological Characterization. *POLYMER-PLASTICS TECHNOLOGY AND MATERIALS* 58, 105–112. <https://doi.org/10.1080/03602559.2018.1466168>
75. Rossi, M., Passeri, D., Sinibaldi, A., Angjellari, M., Tamburri, E., Sorbo, A., Carata, E., Dini, L., 2017. Nanotechnology for Food Packaging and Food Quality Assessment, *Advances in Food and Nutrition Research*. <https://doi.org/10.1016/bs.afnr.2017.01.002>
76. Saberon, S.I., Maguyon-Detras, M.C., Migo, M.V.P., Herrera, M.U., Manalo, R.D., 2018. Microwave-assisted synthesis of zinc oxide nanoparticles on paper, *Key Engineering Materials*. <https://doi.org/10.4028/www.scientific.net/KEM.775.163>
77. Shafie, Z.M.H.M., Ahmad, A.L., 2018. Juxtaposition of PES based hollow fiber membrane: Antifouling and antibacterial potential of LiCl mediated PVA-ZnO blend. *JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY* 62, 273–283. <https://doi.org/10.1016/j.jiec.2018.01.005>
78. Shanshan, G., Xiaoming, S., Jianhua, W., Shitao, Y., Fushan, C., Xinyu, S., 2017. STRUCTURE, MECHANICAL PROPERTIES AND ANTIMICROBIAL ACTIVITY OF NANO-ZnO/CELLULOSE COMPOSITE FILMS. *CELLULOSE CHEMISTRY AND TECHNOLOGY* 51, 355–361.
79. Shi, L.-E., Li, Z.-H., Zheng, W., Zhao, Y.-F., Jin, Y.-F., Tang, Z.-X., 2014. Synthesis, antibacterial activity, antibacterial mechanism and food applications of ZnO nanoparticles: a review. *FOOD ADDITIVES AND CONTAMINANTS PART A-CHEMISTRY ANALYSIS CONTROL EXPOSURE & RISK ASSESSMENT* 31, 173–186. <https://doi.org/10.1080/19440049.2013.865147>
80. Siddiqi, K.S., Rahman, A. ur, Tajuddin, Husen, A., 2018. Properties of Zinc Oxide Nanoparticles and Their Activity Against Microbes. *NANOSCALE RESEARCH LETTERS* 13. <https://doi.org/10.1186/s11671-018-2532-3>

81. Singh, V., Dwivedi, L.M., Baranwal, K., Asthana, S., Sundaram, S., 2018. Oxidized guar gum-ZnO hybrid nanostructures: synthesis, characterization and antibacterial activity. *APPLIED NANOSCIENCE* 8, 1149–1160. <https://doi.org/10.1007/s13204-018-0747-3>
82. Sirelkhatim, A., Mahmud, S., Seenii, A., Kaus, N.H.M., Ann, L.C., Bakhori, S.K.M., Hasan, H., Mohamad, D., 2015. Review on Zinc Oxide Nanoparticles: Antibacterial Activity and Toxicity Mechanism. *NANO-MICRO LETTERS* 7, 219–242. <https://doi.org/10.1007/s40820-015-0040-x>
83. Suarez, D.F., Monteiro, A.P.F., Ferreira, D.C., Brandao, F.D., Krarnbrock, K., Modolo, L.V., Cortes, M.E., Sinisterra, R.D., 2017. Efficient antibacterial nanosponges based on ZnO nanoparticles and doxycycline. *JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY B-BIOLOGY* 177, 85–94. <https://doi.org/10.1016/j.jphotobiol.2017.10.018>
84. Sun, Q., Li, J., Le, T., 2018. Zinc Oxide Nanoparticle as a Novel Class of Antifungal Agents: Current Advances and Future Perspectives. *JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY* 66, 11209–11220. <https://doi.org/10.1021/acs.jafc.8b03210>
85. Tan, E., Karakus, S., Soylu, G.S.P., Birer, O., Zengin, Y., Kilislioglu, A., 2017. Formation and distribution of ZnO nanoparticles and its effect on E-coli in the presence of sepiolite and silica within the chitosan matrix via sonochemistry. *ULTRASONICS SONOCHEMISTRY* 38, 720–725. <https://doi.org/10.1016/j.ultsonch.2016.08.027>
86. Ul-Islam, M., Shehzad, A., Khan, S., Khattak, W.A., Ullah, M.W., Park, J.K., 2014. Antimicrobial and Biocompatible Properties of Nanomaterials. *JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY* 14, 780–791. <https://doi.org/10.1166/jnn.2014.8761>
87. Visinescu, D., Hussien, M.D., Moreno, J.C., Negrea, R., Birjega, R., Somacescu, S., Ene, C.D., Chifiriuc, M.C., Popa, M., Stan, M.S., Carp, O., 2018. Zinc Oxide Spherical-Shaped Nanostructures: Investigation of Surface Reactivity and Interactions with Microbial and Mammalian Cells. *LANGMUIR* 34, 13638–13651. <https://doi.org/10.1021/acs.langmuir.8b02528>
88. Zhang, W., Tu, G., Zhang, H., Zheng, Y., Yang, L., 2014. Synthesis and antibacterial activity of mesoporous zinc oxide particle with high specific surface area. *MATERIALS LETTERS* 114, 119–121. <https://doi.org/10.1016/j.matlet.2013.09.028>

Kocitati

89. Ignjatovic, N.L., Markovic, S., Jugovic, D., Uskokovic, D.P., 2017. Molecular designing of nanoparticles and functional materials. *JOURNAL OF THE SERBIAN CHEMICAL SOCIETY* 82, 607–625. <https://doi.org/10.2298/JSC1612070011I>
90. Markovic, S., Simatovic, I.S., Ahmetovic, S., Veselinovic, L., Stojadinovic, S., Rac, V., Skapin, S.D., Bogdanovic, D.B., Castvan, I.J., Uskokovic, D., 2019. Surfactant-assisted microwave processing of ZnO particles: a simple way for designing the surface-to-bulk defect ratio and improving photo(electro)catalytic properties. *RSC ADVANCES* 9, 17165–17178. <https://doi.org/10.1039/c9ra02553g>

Autocitati

91. Stankovic, A., Sezen, M., Milenkovic, M., Kaisarevic, S., Andric, N., Stevanovic, M., 2016. PLGA/Nano-ZnO Composite Particles for Use in Biomedical Applications: Preparation, Characterization, and Antimicrobial Activity. *JOURNAL OF NANOMATERIALS*. <https://doi.org/10.1155/2016/9425289>

2. [Application of raw peach shell particles for removal of methylene blue](#)

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Heterocitati

1. Abu-El-Halawa, R., Zabin, S.A., Abu-Sittah, H.H., 2016. Investigation of methylene blue dye adsorption from polluted water using oleander plant (*Al defla*) tissues as sorbent. *American Journal of Environmental Sciences* 12, 213–224. <https://doi.org/10.3844/ajessp.2016.213.224>
2. Alijani, H., Beyki, M.H., Kaveh, R., Fazli, Y., 2018. Rapid biosorption of methylene blue by in situ cellulose-grafted poly 4-hydroxybenzoic acid magnetic nanohybrid: multivariate optimization and isotherm study. *POLYMER BULLETIN* 75, 2167–2180. <https://doi.org/10.1007/s00289-017-2148-2>
3. Allahkarami, E., Igder, A., Fazlavi, A., Rezai, B., 2017. Prediction of Co(II) and Ni(II) ions removal from wastewater using artificial neural network and multiple regression models. *PHYSICOCHEMICAL PROBLEMS OF MINERAL PROCESSING* 53, 1105–1118. <https://doi.org/10.5277/ppmp170233>
4. Amourache, M., Amira-Guebailia, H., Houache, O., 2018. *Claviceps purpurea* fungus: a promising biosorbent for wastewater treatment. *JOURNAL OF NEW TECHNOLOGY AND MATERIALS* 8, 74–83. <https://doi.org/10.12816/0048927>
5. Bazrafshan, A.A., Ghaedi, M., Hajati, S., Naghiha, R., Asfaram, A., 2017. Synthesis of ZnO-nanorod-based materials for antibacterial, antifungal activities, DNA cleavage and efficient ultrasound-assisted dyes adsorption. *ECOTOXICOLOGY AND ENVIRONMENTAL SAFETY* 142, 330–337. <https://doi.org/10.1016/j.ecoenv.2017.04.011>
6. Biliuta, G., Coseri, S., 2019. Cellulose: A ubiquitous platform for ecofriendly metal nanoparticles preparation. *COORDINATION CHEMISTRY REVIEWS* 383, 155–173. <https://doi.org/10.1016/j.ccr.2019.01.007>
7. Boumaza, S., Yenounne, A., Hachi, W., Kaouah, F., Bouhamidi, Y., Trari, M., 2018. Application of *Typha angustifolia* (L.) Dead Leaves Waste as Biomaterial for the Removal of Cationic Dye from Aqueous Solution. *INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH* 12, 561–573. <https://doi.org/10.1007/s41742-018-0111-1>
8. Chen, S., Zhang, X., Huang, H., Zhang, M., Nie, C., Lu, T., Zhao, W., Zhao, C., 2017. Core@ shell poly (acrylic acid) microgels/polyethersulfone beads for dye uptake from wastewater. *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING* 5, 1732–1743. <https://doi.org/10.1016/j.jece.2017.03.013>
9. Eghbali-Arani, M., Sobhani-Nasab, A., Rahimi-Nasrabadi, M., Ahmadi, F., Pourmasoud, S., 2018. Ultrasound-assisted synthesis of YbVO₄ nanostructure and YbVO₄/CuWO₄ nanocomposites for enhanced photocatalytic degradation of organic dyes under visible light. *ULTRASONICS SONOCHEMISTRY* 43, 120–135. <https://doi.org/10.1016/j.ultsonch.2017.11.040>
10. Elwakeel, K.Z., Elgarahy, Ahmed.M., Mohammad, S.H., 2017. Use of beach bivalve shells located at Port Said coast (Egypt) as a green approach for methylene blue removal. *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING* 5, 578–587. <https://doi.org/10.1016/j.jece.2016.12.032>
11. Franco, D.S.P., Piccin, J.S., Lima, E.C., Dotto, G.L., 2015. Interpretations about methylene blue adsorption by surface modified chitin using the statistical physics treatment. *ADSORPTION-JOURNAL OF THE INTERNATIONAL ADSORPTION SOCIETY* 21, 557–564. <https://doi.org/10.1007/s10450-015-9699-z>
12. Ghafar, H.H.A., Embaby, M.A., Radwan, E.K., Abdel-Aty, A.M., 2017. Biosorptive removal of basic dye methylene blue using raw and CaCl₂ treated biomass of green microalga *Scenedesmus obliquus*. *DESALINATION AND WATER TREATMENT* 81, 274–281. <https://doi.org/10.5004/dwt.2017.21108>
13. Hasan, R., Razifuddin, N.A.M., Jusoh, N.W.C., Jusoh, R., Setiabudi, H.D., 2018. *Artocarpus integer* peel as a highly effective low-cost adsorbent for methylene blue removal: Kinetics, isotherm, thermodynamic and pelletized studies. *MALAYSIAN JOURNAL OF FUNDAMENTAL AND APPLIED SCIENCES* 14, 25–31.
14. Hassanpour, M., Safardoust-Hojaghan, H., Salavati-Niasari, M., 2017. Degradation of methylene blue and Rhodamine B as water pollutants via green synthesized Co₃O₄/ZnO nanocomposite. *JOURNAL OF MOLECULAR LIQUIDS* 229, 293–299. <https://doi.org/10.1016/j.molliq.2016.12.090>

15. Kamboh, M.A., Ibrahim, W.A.W., Nodeh, H.R., Zardari, L.A., Sherazi, S.T.H., Sanagi, M.M., 2019. p-Sulphonatocalix[8]arene functionalized silica resin for the enhanced removal of methylene blue from wastewater: equilibrium and kinetic study. *SEPARATION SCIENCE AND TECHNOLOGY* 54, 2240–2251. <https://doi.org/10.1080/01496395.2018.1543322>
16. Khan, M.I., Min, Teoh.K., Azizli, K., Sufian, S., Ullah, H., Man, Z., 2015. Effective removal of methylene blue from water using phosphoric acid based geopolymers: synthesis, characterizations and adsorption studies. *RSC ADVANCES* 5, 61410–61420. <https://doi.org/10.1039/c5ra08255b>
17. Khemmari, F., Benrachedi, K., 2019. PEACH STONES VALORIZED TO HIGH EFFICIENT BIOSORBENT FOR HEXAVALENT CHROMIUM REMOVAL FROM AQUEOUS SOLUTION: ADSORPTION KINETICS, EQUILIBRIUM AND THERMODYNAMIC STUDIES. *REVUE ROUMAINE DE CHIMIE* 64, 603–613. <https://doi.org/10.33224/rch.2019.64.7.07>
18. Khemmari, F., Benrachedi, K., n.d. Valorization of peach stones to high efficient activated carbon: Synthesis, characterization, and application for Cr(VI) removal from aqueous medium. *ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS*. <https://doi.org/10.1080/15567036.2019.1598519>
19. Koyuncu, F., Guzel, F., Saygili, H., 2018. Role of optimization parameters in the production of nanoporous carbon from mandarin shells by microwave-assisted chemical activation and utilization as dye adsorbent. *ADVANCED POWDER TECHNOLOGY* 29, 2108–2118. <https://doi.org/10.1016/j.appt.2018.05.019>
20. Masih, M., Anthony, P., 2018. Study of modified banana fiber as adsorbent for Cadmium(II) ions from aqueous solution. *Asian Journal of Chemistry* 30, 1031–1036. <https://doi.org/10.14233/ajchem.2018.21139>
21. Miraboutalebi, S.M., Nikouzad, S.K., Peydayesh, M., Allahgholi, N., Vafajoo, L., McKay, G., 2017. Methylene blue adsorption via maize silk powder: Kinetic, equilibrium, thermodynamic studies and residual error analysis. *PROCESS SAFETY AND ENVIRONMENTAL PROTECTION* 106, 191–202. <https://doi.org/10.1016/j.psep.2017.01.010>
22. Miri, M.R., Khosravi, R., Taghizadeh, A.A., Fazlzadehdavil, M., Samadi, Z., Eslami, H., Gholami, A., Ghahramani, E., 2019. Comparison of zero valent iron and zinc oxide green nanoparticles loaded on activated carbon for efficient removal of Methylene blue. *DESALINATION AND WATER TREATMENT* 148, 312–323. <https://doi.org/10.5004/dwt.2019.23883>
23. Mohebbali, S., Bastani, D., Shayesteh, H., 2018. Methylene blue removal using modified celery (*Apium graveolens*) as a low-cost biosorbent in batch mode: Kinetic, equilibrium, and thermodynamic studies. *JOURNAL OF MOLECULAR STRUCTURE* 1173, 541–551. <https://doi.org/10.1016/j.molstruc.2018.07.016>
24. Naseem, K., Huma, R., Shahbaz, A., Jamal, J., Rehman, M.Z.U., Sharif, A., Ahmed, E., Begum, R., Irfan, A., Al-Sehemi, A.G., Farooqi, Z.H., 2019. Extraction of Heavy Metals from Aqueous Medium by Husk Biomass: Adsorption Isotherm, Kinetic and Thermodynamic study. *ZEITSCHRIFT FÜR PHYSIKALISCHE CHEMIE-INTERNATIONAL JOURNAL OF RESEARCH IN PHYSICAL CHEMISTRY & CHEMICAL PHYSICS* 233, 201–223. <https://doi.org/10.1515/zpch-2018-1182>
25. Rahimdokht, M., Pajootan, E., Arami, M., 2016a. Central composite methodology for methylene blue removal by *Elaeagnus angustifolia* as a novel biosorbent. *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING* 4, 1407–1416. <https://doi.org/10.1016/j.jece.2016.02.006>
26. Rahimdokht, M., Pajootan, E., Arami, M., 2016b. Application of melon seed shell as a natural low-cost adsorbent for the removal of Methylene Blue from dye-bearing wastewaters: optimization, isotherm, kinetic, and thermodynamic. *DESALINATION AND WATER TREATMENT* 57, 18049–18061. <https://doi.org/10.1080/19443994.2015.1086698>
27. Rangabhashiyam, S., Balasubramanian, P., 2018. Adsorption behaviors of hazardous methylene blue and hexavalent chromium on novel materials derived from *Pterospermum acerifolium* shells. *JOURNAL OF MOLECULAR LIQUIDS* 254, 433–445. <https://doi.org/10.1016/j.molliq.2018.01.131>

28. Roy, U., Das, P., Bhowal, A., 2019. Treatment of azo dye (congo red) solution in fluidized bed bioreactor with simultaneous approach of adsorption coupled with biodegradation: optimization by response surface methodology and toxicity assay. CLEAN TECHNOLOGIES AND ENVIRONMENTAL POLICY 21, 1675–1686. <https://doi.org/10.1007/s10098-019-01736-7>
29. Roy, U., Sengupta, S., Banerjee, P., Das, P., Bhowal, A., Datta, S., 2018. Assessment on the decolourization of textile dye (Reactive Yellow) using Pseudomonas sp immobilized on fly ash: Response surface methodology Chock for optimization and toxicity evaluation. JOURNAL OF ENVIRONMENTAL MANAGEMENT 223, 185–195. <https://doi.org/10.1016/j.jenvman.2018.06.026>
30. Sadigh, M.K., Zakerhamidi, M.S., Rezaei, B., Milanchian, K., 2017. Environment effects on the nonlinear absorption properties of Methylene blue under different power of excitation beam. JOURNAL OF MOLECULAR LIQUIDS 229, 548–554. <https://doi.org/10.1016/j.molliq.2016.12.108>
31. Salimi, F., Emami, S.S., Karami, C., 2018. Removal of methylene blue from water solution by modified nano-boehmite with Bismuth. INORGANIC AND NANO-METAL CHEMISTRY 48, 31–40. <https://doi.org/10.1080/24701556.2017.1357628>
32. Salimi, F., Rahimi, H., Karami, C., 2019. Removal of methylene blue from water solution by modified nanogoethite by Cu. DESALINATION AND WATER TREATMENT 137, 334–344. <https://doi.org/10.5004/dwt.2019.22922>
33. Salimi, F., Tahmasobi, K., Karami, C., Jahangiri, A., 2017. Preparation of Modified nano-SiO₂ by Bismuth and Iron as a novel Remover of Methylene Blue from Water Solution. JOURNAL OF THE MEXICAN CHEMICAL SOCIETY 61, 250–259.
34. Silva, T.S., Meili, L., Carvalho, S.H.V., Soletti, J.I., Dotto, G.L., Fonseca, E.J.S., 2017. Kinetics, isotherm, and thermodynamic studies of methylene blue adsorption from water by Mytella falcata waste. ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH 24, 19927–19937. <https://doi.org/10.1007/s11356-017-9645-6>
35. Valta, K., Damala, P., Panaretou, V., Orli, E., Moustakas, K., Loizidou, M., 2017. Review and Assessment of Waste and Wastewater Treatment from Fruits and Vegetables Processing Industries in Greece. WASTE AND BIOMASS VALORIZATION 8, 1629–1648. <https://doi.org/10.1007/s12649-016-9672-4>
36. Yang, Y., Chen, Z., Wu, X., Zhang, X., Yuan, G., 2018. Nanoporous cellulose membrane doped with silver for continuous catalytic decolorization of organic dyes. CELLULOSE 25, 2547–2558. <https://doi.org/10.1007/s10570-018-1710-x>
37. Zhou, Y., Zhang, L., Cheng, Z., 2015. Removal of organic pollutants from aqueous solution using agricultural wastes: A review. JOURNAL OF MOLECULAR LIQUIDS 212, 739–762. <https://doi.org/10.1016/j.molliq.2015.10.023>
38. Zhang, L., Zeng, Y., Cheng, Z., 2016. Removal of heavy metal ions using chitosan and modified chitosan: A review. Journal of Molecular Liquids 214, 175–191. <https://doi.org/10.1016/j.molliq.2015.12.013>

Kocitaci

39. Lopicic, Z.R., Stojanovic, M.D., Milojkovic, J.V., Kijevcanin, M.Lj., 2017a. Lignocellulosic Waste Material - from Landfill to Sorbent and Fuel. EUROPEAN JOURNAL OF SUSTAINABLE DEVELOPMENT 6, 192–199. <https://doi.org/10.14207/ejsd.2017.v6n2p193>
40. Lopicic, Z.R., Stojanovic, M.D., Radoicic, T.S.K., Milojkovic, J.V., Petrovic, M.S., Mihajlovic, M.L., Kijevcanin, M.L.J., 2017b. Optimization of the process of Cu(II) sorption by mechanically treated Prunus persica L. - Contribution to sustainability in food processing industry. JOURNAL OF CLEANER PRODUCTION 156, 95–105. <https://doi.org/10.1016/j.jclepro.2017.04.041>

3. [Controlled mechanochemically assisted synthesis of ZnO nanopowders in the presence of oxalic acid](#)

By: [Stankovic, A.](#); [Veselinovic, Lj.](#); [Skapin, S. D.](#); et al.

Heterocitati

1. Alberto Huerta-Aguilar, C., Araceli Ramirez-Alejandre, A., Thangarasu, P., Angel Arenas-Alatorre, J., Alejandro Reyes-Dominguez, I., de la Luz Corea, M., 2019. Crystal phase induced band gap energy enhancing the photo-catalytic properties of Zn-Fe₂O₄/Au NPs: experimental and theoretical studies. CATALYSIS SCIENCE & TECHNOLOGY 9, 3066–3080. <https://doi.org/10.1039/c9cy00678h>
2. Ba-Abbad, M.M., Kadhum, A.A.H., Mohamad, A.B., Takriff, M.S., Sopian, K., 2013a. The effect of process parameters on the size of ZnO nanoparticles synthesized via the sol-gel technique. JOURNAL OF ALLOYS AND COMPOUNDS 550, 63–70. <https://doi.org/10.1016/j.jallcom.2012.09.076>
3. Ba-Abbad, M.M., Kadhum, A.A.H., Mohamad, A.B., Takriff, M.S., Sopian, K., 2013b. Optimization of process parameters using D-optimal design for synthesis of ZnO nanoparticles via sol-gel technique. JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY 19, 99–105. <https://doi.org/10.1016/j.jiec.2012.07.010>
4. Chidhambaram, N., 2019. Augmented antibacterial efficacies of the aluminium doped ZnO nanoparticles against four pathogenic bacteria. Materials Research Express 6. <https://doi.org/10.1088/2053-1591/ab1804>
5. El Saeed, A.M., Abd El-Fattah, M., Azzam, A.M., 2015. Synthesis of ZnO nanoparticles and studying its influence on the antimicrobial, anticorrosion and mechanical behavior of polyurethane composite for surface coating. DYES AND PIGMENTS 121, 282–289. <https://doi.org/10.1016/j.dyepig.2015.05.037>
6. Gancheva, M., Naydenov, A., Iordanova, R., Nihtianova, D., Stefanov, P., 2015. Mechanochemically assisted solid state synthesis, characterization, and catalytic properties of MgWO₄. JOURNAL OF MATERIALS SCIENCE 50, 3447–3456. <https://doi.org/10.1007/s10853-015-8904-5>
7. Karimi, S., Ataie, A., 2016. Characterization of mechanothermally processed nanostructured ZnO. INTERNATIONAL JOURNAL OF MINERALS METALLURGY AND MATERIALS 23, 588–594. <https://doi.org/10.1007/s12613-016-1270-8>
8. Khan, S.R., Abid, S., Jamil, S., Aqib, A.I., Faisal, M.N., Janjua, M.R.S.A., 2019. Layer by Layer Assembly of Zinc Oxide Nanotubes and Nanoflowers as Catalyst for Separate and Simultaneous Catalytic Degradation of Dyes and Fuel Additive. CHEMISTRYSELECT 4, 5548–5559. <https://doi.org/10.1002/slct.201900645>
9. Kolodziejczak-Radzimska, A., Jesionowski, T., 2014. Zinc Oxide-From Synthesis to Application: A Review. MATERIALS 7, 2833–2881. <https://doi.org/10.3390/ma7042833>
10. Kumar, S., Varma, R.S., Zboril, R., Gawande, M.B., 2019. Chapter 3: Support Morphology-dependent Activity of Nanocatalysts, RSC Catalysis Series. <https://doi.org/10.1039/9781788016292-00084>
11. Morsi, S.M.M., Mohsen, R.M., Selim, M.M., El-Sherif, H.S., 2019. Sol-gel, Hydrothermal, and Combustion Synthetic Methods of Zinc Oxide Nanoparticles and Their Modification with Polyaniline for Antimicrobial Nanocomposites Application. EGYPTIAN JOURNAL OF CHEMISTRY 62, 1531–1544. <https://doi.org/10.21608/ejchem.2019.6952.1578>
12. Parihar, V., Raja, M., Paulose, R., 2018. A BRIEF REVIEW OF STRUCTURAL, ELECTRICAL AND ELECTROCHEMICAL PROPERTIES OF ZINC OXIDE NANOPARTICLES. REVIEWS ON ADVANCED MATERIALS SCIENCE 53, 119–130. <https://doi.org/10.1515/rams-2018-0009>
13. Ponnammma, D., Cabibihan, J.-J., Rajan, M., Pethaiah, S.S., Deshmukh, K., Gogoi, J.P., Pasha, S.K.K., Ahamed, M.B., Krishnegowda, J., Chandrashekar, B.N., Polu, A.R., Cheng, C., 2019. Synthesis, optimization and applications of ZnO/polymer nanocomposites. MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS 98, 1210–1240. <https://doi.org/10.1016/j.msec.2019.01.081>
14. Popa, M., Mesaros, A., Mereu, R.A., Suci, R., Vasile, B.S., Gabor, M.S., Ciontea, L., Petrisor, T., 2013. Optical properties correlated with morphology and structure of TEAH modified ZnO

nanoparticles via precipitation method. JOURNAL OF ALLOYS AND COMPOUNDS 574, 255–259.
<https://doi.org/10.1016/j.jallcom.2013.04.078>

15. Rad, M., Dehghanpour, S., 2016. ZnO as an efficient nucleating agent and morphology template for rapid, facile and scalable synthesis of MOF-46 and ZnO@MOF-46 with selective sensing properties and enhanced photocatalytic ability. RSC ADVANCES 6, 61784–61793.
<https://doi.org/10.1039/c6ra12410k>
16. Tadjarodi, A., Imani, M., Izadi, M., Shokrayian, J., 2015. Solvent free synthesis of ZnO nanostructures and evaluation of their capability for water treatment. MATERIALS RESEARCH BULLETIN 70, 468–477. <https://doi.org/10.1016/j.materresbull.2015.04.059>
17. Tadjarodi, A., Izadi, M., Imani, M., 2013. Synthesis and characterization of the special ZnO nanostructure by mechanochemical process. MATERIALS LETTERS 92, 108–110.
<https://doi.org/10.1016/j.matlet.2012.10.045>
18. Wagener, P., Lau, M., Breitung-Faes, S., Kwade, A., Barcikowski, S., 2012. Physical fabrication of colloidal ZnO nanoparticles combining wet-grinding and laser fragmentation. APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING 108, 793–799. <https://doi.org/10.1007/s00339-012-6971-x>

Kocitati

19. Ignjatovic, N.L., Markovic, S., Jugovic, D., Uskokovic, D.P., 2017. Molecular designing of nanoparticles and functional materials. JOURNAL OF THE SERBIAN CHEMICAL SOCIETY 82, 607–625. <https://doi.org/10.2298/JSC1612070011I>

4. [ZnO micro and nanocrystals with enhanced visible light absorption](#)

By: [Stankovic, Ana](#); [Stojanovic, Zoran](#); [Veselinovic, Ljiljana](#); et al.

[MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS](#) Volume: 177 Issue: 13 Pages: 1038-1045 Published: AUG 1 2012

Heterocititi

1. Al-Naser, Q.A.H., Zhou, J., Wang, H., Liu, G., Wang, L., 2015. Synthesis, growth and characterization of ZnO microtubes using a traveling-wave mode microwave system. MATERIALS RESEARCH BULLETIN 66, 65–70. <https://doi.org/10.1016/j.materresbull.2015.01.037>
2. Araujo Junior, E.A., Nobre, F.X., Sousa, G. da S., Cavalcante, L.S., de Moraes Chaves Santos, M.R., Souza, F.L., Elias de Matos, J.M., 2017. Synthesis, growth mechanism, optical properties and catalytic activity of ZnO microcrystals obtained via hydrothermal processing. RSC ADVANCES 7, 24263–24281. <https://doi.org/10.1039/c7ra03277c>
3. Duo, S., Li, Y., Liu, Z., Zhong, R., Liu, T., 2016. Novel hybrid self-assembly of an ultralarge ZnO macroflower and defect intensity-induced photocurrent and photocatalytic properties by facile hydrothermal synthesis using CO(NH₂)₂-N₂H₄ as alkali sources. MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING 56, 196–212. <https://doi.org/10.1016/j.mssp.2016.08.018>
4. Duo, S., Zhong, R., Liu, Z., Liu, T., Zou, Z., Li, X., Ran, Q., 2018a. Fabrication, mechanism, formic acid-tuned degradation and photocatalytic hydrogen production of novel modified ZnO spheres by L - TA - DMF assisted hydrothermal method. MATERIALS RESEARCH BULLETIN 106, 307–331. <https://doi.org/10.1016/j.materresbull.2018.06.012>
5. Duo, S., Zhong, R., Liu, Z., Wang, J., Liu, T., Huang, C., Wu, H., 2018b. One-step hydrothermal synthesis of ZnO microflowers and their composition-/hollow nanorod-dependent wettability and photocatalytic property. JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS 120, 20–33. <https://doi.org/10.1016/j.jpcs.2018.04.019>
6. Guang-Li, W., Xiao-Hua, Z., Meng, L., Zhen-Zhen, L., Cai-Zhu, L., Xiang-Dong, L., 2015. Controllable Synthesis of Hierarchical Structure ZnO Photocatalysts with Different Morphologies via Sol-Gel Assisted Hydrothermal Method. CHINESE JOURNAL OF INORGANIC CHEMISTRY 31, 61–68.

7. Jo, W.-K., Kang, H.-J., 2013. (Ratios: 5, 10, 50, 100, and 200) Polyaniline-TiO₂ composites under visible- or UV-light irradiation for decomposition of organic vapors. MATERIALS CHEMISTRY AND PHYSICS 143, 247–255. <https://doi.org/10.1016/j.matchemphys.2013.08.060>
8. Ledesma, A.E., Maria Chemes, D., de los Angeles Frias, M., Guauque Torres, M. del P., 2017. Spectroscopic characterization and docking studies of ZnO nanoparticle modified with BSA. APPLIED SURFACE SCIENCE 412, 177–188. <https://doi.org/10.1016/j.apsusc.2017.03.202>
9. Liu, T., Li, Y., Zhang, H., Wang, M., Fei, X., Duo, S., Chen, Y., Pan, J., Wang, W., 2015. Tartaric acid assisted hydrothermal synthesis of different flower-like ZnO hierarchical architectures with tunable optical and oxygen vacancy-induced photocatalytic properties. APPLIED SURFACE SCIENCE 357, 516–529. <https://doi.org/10.1016/j.apsusc.2015.09.031>
10. Peles, A., Pavlovic, V.P., Filipovic, S., Obradovic, N., Mancic, L., Krstic, J., Mitric, M., Vlahovic, B., Rasic, G., Kosanovic, D., Pavlovic, V.B., 2015. Structural investigation of mechanically activated ZnO powder. JOURNAL OF ALLOYS AND COMPOUNDS 648, 971–979. <https://doi.org/10.1016/j.jallcom.2015.06.247>
11. Ristic, M., Marcius, M., Petrovic, Z., Ivanda, M., Music, S., 2014. The Influence of Experimental Conditions on the Formation of ZnO Fibers by Electrospinning. CROATICA CHEMICA ACTA 87, 315–320. <https://doi.org/10.5562/cca2409>
12. Rocha, L.S.R., Deus, R.C., Foschini, C.R., Moura, F., Garcia, F.G., Simoes, A.Z., 2014. Photoluminescence emission at room temperature in zinc oxide nano-columns. MATERIALS RESEARCH BULLETIN 50, 12–17. <https://doi.org/10.1016/j.materresbull.2013.09.049>
13. Silambarasan, M., Saravanan, S., Soga, T., 2015. Raman and photoluminescence studies of Ag and Fe-doped ZnO nanoparticles. International Journal of ChemTech Research 7, 1644–1650.
14. Tadjarodi, A., Imani, M., Izadi, M., Shokrayian, J., 2015. Solvent free synthesis of ZnO nanostructures and evaluation of their capability for water treatment. MATERIALS RESEARCH BULLETIN 70, 468–477. <https://doi.org/10.1016/j.materresbull.2015.04.059>
15. Xie, H., Gu, Y., Mu, H., 2018. Photocatalytic Performance of 3D Ni/Graphene/ZnO Composites Fabricated by Hydrothermal Processing. JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY 18, 4822–4833. <https://doi.org/10.1166/jnn.2018.15341>

Kocitati

16. Ignjatovic, N.L., Markovic, S., Jugovic, D., Uskokovic, D.P., 2017. Molecular designing of nanoparticles and functional materials. JOURNAL OF THE SERBIAN CHEMICAL SOCIETY 82, 607–625. <https://doi.org/10.2298/JSC1612070011I>
17. Markovic, S., Simatovic, I.S., Ahmetovic, S., Veselinovic, L., Stojadinovic, S., Rac, V., Skapin, S.D., Bogdanovic, D.B., Castvan, I.J., Uskokovic, D., 2019. Surfactant-assisted microwave processing of ZnO particles: a simple way for designing the surface-to-bulk defect ratio and improving photo(electro)catalytic properties. RSC ADVANCES 9, 17165–17178. <https://doi.org/10.1039/c9ra02553g>

Autocitati

18. Markovic, S., Stankovic, A., Dostanic, J., Veselinovic, L., Mancic, L., Skapin, S.D., Drazic, G., Jankovic-Castvan, I., Uskokovic, D., 2017. Simultaneous enhancement of natural sunlight and artificial UV-driven photocatalytic activity of a mechanically activated ZnO/SnO₂ composite. RSC ADVANCES 7, 42725–42737. <https://doi.org/10.1039/c7ra06895f>

5. [Synthesis of ZnO and ZrO₂ powders by mechanochemical processing](#)

By: [Celikovic, A.](#); [Kandic, Lj.](#); [Zdujic, M.](#); et al.

Conference: 8th Conference of the Yugoslav-Materials-Research-Society (Yu-MRS) Location: Herceg Novi, MONTENEGRO Date: SEP 04-08, 2006

Sponsor(s): Yugoslav Mat Res Soc

Heterocitati

1. Dallali Isfahani, T., Javadpour, J., Khavandi, A., Dinnebier, R., Rezaie, H.R., Goodarzi, M., 2012. Mechanochemical synthesis of zirconia nanoparticles: Formation mechanism and phase transformation. International Journal of Refractory Metals and Hard Materials 31, 21–27. <https://doi.org/10.1016/j.ijrmhm.2011.08.011>
2. James, S.L., Adams, C.J., Bolm, C., Braga, D., Collier, P., Frišić, T., Grepioni, F., Harris, K.D.M., Hyett, G., Jones, W., Krebs, A., Mack, J., Maini, L., Orpen, A.G., Parkin, I.P., Shearouse, W.C., Steed, J.W., Waddell, D.C., 2012a. Mechanochemistry: Opportunities for new and cleaner synthesis. Chemical Society Reviews 41, 413–447. <https://doi.org/10.1039/c1cs15171a>
3. James, S.L., Adams, C.J., Bolm, C., Braga, D., Collier, P., Frišić, T., Grepioni, F., Harris, K.D.M., Hyett, G., Jones, W., Krebs, A., Mack, J., Maini, L., Orpen, A.G., Parkin, I.P., Shearouse, W.C., Steed, J.W., Waddell, D.C., 2012b. Playing with organic radicals as building blocks for functional molecular materials. Chemical Society Reviews 41, 413–447. <https://doi.org/10.1039/c1cs15171a>
4. Rao, C.N.R., Biswas, K., 2015. Essentials of Inorganic Materials Synthesis, Essentials of Inorganic Materials Synthesis. <https://doi.org/10.1002/9781118892671>
5. Rives, V., 2015. From Solid-State Chemistry to Soft Chemistry Routes, in: Perovskites and Related Mixed Oxides: Concepts and Applications. pp. 1–24. <https://doi.org/10.1002/9783527686605.ch01>
6. Shi, L., Chen, W., Zhou, X., Zhao, F., Li, Y., 2014. Pr-doped 3Y-TZP nanopowders for colored dental restorations: Mechanochemical processing, chromaticity and cytotoxicity. Ceramics International 40, 8569–8574. <https://doi.org/10.1016/j.ceramint.2014.01.071>

Kocitaci

7. Uskoković, D., 2007. Controlled designing of fine particles at molecular and nano levels. Presented at the Materials Science and Technology Conference and Exhibition, MS and T'07 - "Exploring Structure, Processing, and Applications Across Multiple Materials Systems," pp. 691–702.

Autocitaci

8. Stanković, A., Veselinović, L., Škapin, S.D., Marković, S., Uskoković, D., 2011. Controlled mechanochemically assisted synthesis of ZnO nanopowders in the presence of oxalic acid. Journal of Materials Science 46, 3716–3724. <https://doi.org/10.1007/s10853-011-5273-6>

6. [Effect of PEO molecular weight on sunlight induced photocatalytic activity of ZnO/PEO composites](#)

By: [Markovic, Smilja](#); [Rajic, Vladimir](#); [Stankovic, Ana](#); et al.

[SOLAR ENERGY](#) Volume: 127 Pages: 124-135 Published: APR 2016

Heterocitaci

1. Antil-Martini, K., Contreras, D., Yanez, J., Cornejo, L., Santander, P., Mansilla, H.D., 2017. Solar light driven oxidation of gentisic acid on ZnO. SOLAR ENERGY 142, 26–32. <https://doi.org/10.1016/j.solener.2016.12.005>
2. Choudhary, S., 2018. Structural, optical, dielectric and electrical properties of (PEO-PVP)-ZnO nanocomposites. JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS 121, 196–209. <https://doi.org/10.1016/j.jpics.2018.05.017>

Kocitaci

3. Ignjatovic, N.L., Markovic, S., Jugovic, D., Uskokovic, D.P., 2017. Molecular designing of nanoparticles and functional materials. JOURNAL OF THE SERBIAN CHEMICAL SOCIETY 82, 607–625. <https://doi.org/10.2298/JSC1612070011I>
4. Markovic, S., Simatovic, I.S., Ahmetovic, S., Veselinovic, L., Stojadinovic, S., Rac, V., Skapin, S.D., Bogdanovic, D.B., Castvan, I.J., Uskokovic, D., 2019. Surfactant-assisted microwave processing of ZnO particles: a simple way for designing the surface-to-bulk defect ratio and improving photo(electro)catalytic properties. RSC ADVANCES 9, 17165–17178. <https://doi.org/10.1039/c9ra02553g>

Autocitati

5. Markovic, S., Stankovic, A., Dostanic, J., Veselinovic, L., Mancic, L., Skapin, S.D., Drazic, G., Jankovic-Castvan, I., Uskokovic, D., 2017. Simultaneous enhancement of natural sunlight and artificial UV-driven photocatalytic activity of a mechanically activated ZnO/SnO₂ composite. RSC ADVANCES 7, 42725–42737. <https://doi.org/10.1039/c7ra06895f>
6. Stankovic, A., Sezen, M., Milenkovic, M., Kaisarevic, S., Andric, N., Stevanovic, M., 2016. PLGA/Nano-ZnO Composite Particles for Use in Biomedical Applications: Preparation, Characterization, and Antimicrobial Activity. JOURNAL OF NANOMATERIALS. <https://doi.org/10.1155/2016/9425289>

H indeks = 6 -----

7. [Simultaneous enhancement of natural sunlight and artificial UV-driven photocatalytic activity of a mechanically activated ZnO/SnO₂ composite](#)

By: [Markovic, Smilja](#); [Stankovic, Ana](#); [Dostanic, Jasmina](#); et al.

[RSC ADVANCES](#) Volume: 7 Issue: 68 Pages: 42725-42737 Published: 2017

Heterocitati

1. Ali, W., Ullah, H., Zada, A., Alamgir, M.K., Muhammad, W., Ahmad, M.J., Nadhman, A., 2018. Effect of calcination temperature on the photoactivities of ZnO/SnO₂ nanocomposites for the degradation of methyl orange. MATERIALS CHEMISTRY AND PHYSICS 213, 259–266. <https://doi.org/10.1016/j.matchemphys.2018.04.015>
2. Song, S., Wu, K., Wu, H., Guo, J., Zhang, L., 2019. Effect of Fe/Sn doping on the photocatalytic performance of multi-shelled ZnO microspheres: experimental and theoretical investigations. DALTON TRANSACTIONS 48, 13260–13272. <https://doi.org/10.1039/c9dt02582k>
3. Xu, M., Jia, S., Chen, C., Zhang, Z., Yan, J., Guo, Y., Zhang, Y., Zhao, W., Yun, J., Wang, Y., 2018. Microwave-assisted hydrothermal synthesis of SnO₂@ZnO hierarchical nanostructures enhanced photocatalytic performance under visible light irradiation. MATERIALS RESEARCH BULLETIN 106, 74–80. <https://doi.org/10.1016/j.materresbull.2018.05.033>

Kocitati

4. Markovic, S., Simatovic, I.S., Ahmetovic, S., Veselinovic, L., Stojadinovic, S., Rac, V., Skapin, S.D., Bogdanovic, D.B., Castvan, I.J., Uskokovic, D., 2019. Surfactant-assisted microwave processing of ZnO particles: a simple way for designing the surface-to-bulk defect ratio and improving photo(electro)catalytic properties. RSC ADVANCES 9, 17165–17178. <https://doi.org/10.1039/c9ra02553g>

8. [PLGA/Nano-ZnO Composite Particles for Use in Biomedical Applications: Preparation, Characterization, and Antimicrobial Activity](#)

By: [Stankovic, Ana](#); [Sezen, Meltem](#); [Milenkovic, Marina](#); et al.

[JOURNAL OF NANOMATERIALS](#) Article Number: 9425289 Published: 2016

Heterocitati

1. Ivanovic, J., Rezwan, K., Kroll, S., 2018. Supercritical CO₂ deposition and foaming process for fabrication of biopolyester-ZnO bone scaffolds. JOURNAL OF APPLIED POLYMER SCIENCE 135. <https://doi.org/10.1002/app.45824>
2. Parmar, A., Kaur, G., Kapil, S., Sharma, V., Sharma, S., 2019. Biogenic PLGA-Zinc oxide nanocomposite as versatile tool for enhanced photocatalytic and antibacterial activity. APPLIED NANOSCIENCE 9, 2001–2016. <https://doi.org/10.1007/s13204-019-01023-3>
3. Reinprecht, L., Izdinsky, J., Vidholdova, Z., 2018. Biological Resistance and Application Properties of Particleboards Containing Nano-Zinc Oxide. ADVANCES IN MATERIALS SCIENCE AND ENGINEERING. <https://doi.org/10.1155/2018/2680121>
4. Vallabani, N.V.S., Sengupta, S., Shukia, R.K., Kumar, A., 2019. ZnO nanoparticles-associated mitochondrial stress-induced apoptosis and G2/M arrest in HaCaT cells: a mechanistic approach. Mutagenesis 34, 265–277. <https://doi.org/10.1093/mutage/gez017>

Република Србија
МИНИСТАРСТВО ПРОСВЕТЕ,
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Комисија за стицање научних звања

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20.05.2015. године

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Инстџиџуџи џехничких наука САНУ у Београду

Комисија за стицање научних звања на седници одржаној 20.05.2015. године, донела је

**ОДЛУКУ
О СТИЦАЊУ НАУЧНОГ ЗВАЊА**

Др Ана Сџанковић

стиче научно звање

Научни сарадник

у области природно-математичких наука - хемија

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утврдио је предлог број 458/1 од 29.12.2014. године на седници научног већа Института и поднео захтев Комисији за стицање научних звања број 030/1 од 28.01.2015. године за доношење одлуке о испуњености услова за стицање научног звања ***Научни сарадник***.

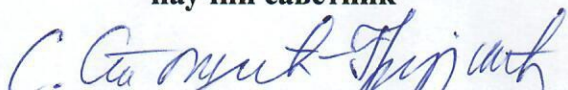
Комисија за стицање научних звања је по претходно прибављеном позитивном мишљењу Матичног научног одбора за хемију на седници одржаној 20.05.2015. године разматрала захтев и утврдила да именована испуњава услове из члана 70. став 5. Закона о научноистраживачкој делатности ("Службени гласник Републике Србије", број 110/05 и 50/06 – исправка и 18/10), члана 2. става 1. и 2. тачке 1 – 4.(прилози) и члана 38. Правилника о поступку и начину вредновања и квантитативном исказивању научноистраживачких резултата истраживача ("Службени гласник Републике Србије", број 38/08) за стицање научног звања ***Научни сарадник***, па је одлучила као у изреци ове одлуке.

Доношењем ове одлуке именована стиче сва права која јој на основу ње по закону припадају.

Одлуку доставити подносиоцу захтева, именованој и архиви Министарства просвете, науке и технолошког развоја у Београду.

ПРЕДСЕДНИК КОМИСИЈЕ

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научни саветник



ДРЖАВНИ СЕКРЕТАР

Др Александар Белић

